Staff Variance Report
For
October 1, 2013 Commission Meeting

"A" category = staff recommendation is for approval with no equal alternatives because of noncompliance is not adverse.
"B" category = staff recommendation is for approval with equal alternatives as stated by the proponent.
"C" category = reserved, meaning staff believes Commission needs to discuss entirety.
"D" category = recommendation is for denial.
"I" category = incomplete (with permission of the Chairman).
"NVR" category = no variance required.

NOTE: All staff recommendations presume code statements on the variances by the applicant are correct, unless otherwise noted. This means that all code statements become conditions of the variances and, if not true, the variances would be subject to Commission sanction. All LBO and LFO responses that they have received a copy of the application for variance are in order, unless otherwise noted.

Tabled Variances:

13-01-36(b) C **Lafayette Family YMCA – Lafayette**

(b) *Remote exterior exits on the back of the building will not be provided with a sidewalk to the public way as required by code.* The exit discharge, "walking surface of the means of egress shall have a slip resistant surface and be securely attached", this is interpreted to require a concrete sidewalk to the public way. The proponent advises that the code does not stipulate that the exit discharge be a paved surface and that a yard can be classified as a component of the exit discharge for a building. The hardship is the cost of installing sidewalks on the back of the building, which is estimated at approximately $40,000.00. If the exit path away from the building is just mud or grass, how do wheelchairs get through it? Tabled at the request of the proponent. Tabled at the proponent's request until the March meeting. Tabled at the request of the proponent until the April meeting. Tabled at the request of the proponent until the June 4th meeting**. <u>Tabled at the request of the proponent until the December 3, 2013, meeting.</u>**

13-06-2 D **SVT Elevators – Munster**

The current elevator was installed without a permit in 1982. The proponent wishing to have the elevator allowed to be maintained as it is without bringing up to today's code, with the assumption that it was installed compliant to the code of record, assuming this is the correct time of installation. Proponent requested to be tabled until the July 2nd meeting. Tabled so proponent can get more information concerning the non-compliant conditions of the elevators and supply a list of the conditions from a certified elevator inspector. Tabled at the request of the proponent at the August meeting. **<u>Tabled till the October meeting, so proponent can get the requested information for the Commission and the proponent did not come to the September meeting.</u>**

13-06-9 D **SVT Elevators – Hammond**

The current elevator was installed without a permit in 1982. The proponent wishing to have the elevator allowed to be maintained as it is without bringing up to today's code, with the assumption that it was installed compliant to the code of record, assuming this is the correct time of installation. **Tabled so proponent can get more information concerning the non-compliant conditions of the elevators and supply a list of the conditions from a certified elevator inspector. Tabled at the request of the proponent at the August meeting. Tabled till the October meeting, so proponent can get the requested information for the Commission and the proponent did not come to the September meeting.**

13-08-42 I **Wishard Hospital – Replacement Facility – Indianapolis** Project #345739

Tabled at the request of the proponent till the October meeting. **Withdrawn by the proponent.**

13-08-52 C **The International School of Columbus – Columbus** Project #366030

The existing church structure is being changed to an "E" occupancy and is over area for that occupancy. The proponent advises that the buildings were constructed over the last 40 years and, prior to the leasing of the building to the school, the buildings were used for a large church and Sunday school. The basement will be sprinklered per code as part of this project. The change of use also includes two new exits, one from the basement to eliminate a dead end corridor and exit way from the furnaces and service panels and the other new exit is from the 2nd story of the athletic building. It provides access to the outside with a new hall and exterior stairs. The hardship is that the cost to sprinkler both buildings would be cost prohibitive and dividing the existing building with fire walls would be problematic. What is the cost to comply? Which building is the existing church building? The drawings don't identify any building as an existing church building. **Tabled to allow proponent time to do a Chapter 34 evaluation. Tabled at the request of the proponent till the October meeting.**

13-09-1 B **516 Northwestern Avenue – West Lafayette**

A Kone EcoSpace elevator will be installed with 8 mm steel rope suspension cable and 6 mm steel wire rope governor cable, which do not meet the code sizes. The proponent advises that they will provide any additional training requested by the state, including providing rope gauges to each elevator inspector. The hardship is, this type of system will eliminate the need for an elevator penthouse, lowering the cost of the overall project. **Tabled at the request of the proponent till the October meeting.**

13-09-8 A **North Meridian Professional Center – Indianapolis**

The occupant use hose stations stored in the stairways will be removed which is not allowed by the code of record. The hose stations will not be used by the fire department. The proponent will not provide the required training for the individuals in the building to use the hoses. The hardship is the cost to maintain for no reason. **Tabled incomplete and no proponent.**

13-09-36 B **Riley Hospital for Children – Sequence 3b – Indianapolis** Project #362046

~~*Two sets of*~~ *Three* egress *doors in the central sterilization room of the hospital will be interlocked so that one door cannot be opened until the other door is shut, which is not allowed by code.* The hospital would like to use access controlled egress doors so that the doors are openable during an emergency. The proponent advises that the proposed system is the standard door configuration in hospital facilities throughout the State of Indiana. The proposed door system would be permitted if the basement had been classified as Healthcare (I-2) occupancy when it was constructed. The proposed 2014 IBC permits the use of access controlled egress doors. The access control system will comply with all of the criteria outlined in Section 1008.1.3.4, access controlled egress doors, which was deleted from the 2012 IBC. The building is equipped throughout with a quick sprinkler system. Corridors throughout the smoke compartment containing the sliding doors are equipped with automatic smoke detection. The hardship is the need to keep the doors from being open and allowing the air to freely circulate throughout the area. **Tabled at the request of the proponent till the October meeting.**

13-09-39 C **Hannah and Friends New Activity Center – South Bend** Project #365698

The code required sprinkler system for the A-3 occupancy with an occupant load exceeding 300 will not be provided. The proponent advises that the space is defined in the IBC as an A-3 Assembly occupancy. This space will only be used as an exercise facility for the residents. As an assembly space, the occupant load would exceed 300. The proponent states that the total building gym and accessory areas, occupant load would be up to 178 occupants; the calculated occupant load is 1095. The fire area does not exceed 12,000 sq. ft. The fire area is located on the same floor level as exit discharge. The building complies with all exiting requirements. The hardship is that there is no public water available and the system would require a 12" diameter well, a diesel engine driver or 3 phase power to operate the system. Three phase is not available on site. The total cast for a completed system would exceed $150,000.00. **Tabled to allow proponent time to look at alternatives.**

13-09-45 C **Chef Suzanne – Fishers**

The new 2nd floor structure and stair will be of combustible construction. The code states that unless meeting one of the exceptions in Section 603.,1 the building elements in Type IIB construction are required to be of noncombustible construction. The proponent advises that the building is a multi-tenant structure, originally designed for small office/business tenants. The tenant space footprint will be 1,200 sq. ft. and the new 2nd floor will be approximately 830 sq. ft. in area. The 2nd floor will be constructed within the tall 1 story volume. The space will be a catering kitchen, classified as B occupancy and will be Type IIB construction. The stair and floor structure, including structural decking, will be fire retardant treated wood, which is impregnated with chemicals during manufacture. When tested per ASTM E84, the treated wood has a flame spread index of 25 or less, and is also required to withstand an additional 20 minute period of time under the test and show no evidence of significant progressive combustion. For comparison, exposed interior finishes in a B occupancy are permitted to have a flame spread index of up to 200 per Table 803.5. The hardship is the cost to construct the floor and stair of noncombustible (steel or concrete) construction. Other tenant spaces have 2nd floors built

in this complex with combustible construction. **Tabled at the request of the proponent till the October meeting..**

13-09-47(g) **The Lofts at Pulliam Square – Indianapolis**

C (g) *The existing parking garage included in the project will have openings reduced on one side to the extent that each tier will fall just short of the required openings overall to retain status as an open parking garage per Section 406.3 and this in effect requires classification of the garage as an enclosed parking garage per Section 406.4 and requires mechanical ventilation, the variance request is to permit the garage to utilize the remaining existing exterior openings for ventilation and add assistance mechanically to offset the loss of a portion of the required exterior openings.* The proponent advises to see the attached details of the mechanical design and data regarding exterior openings. The hardship is the imposition of the rule would require a complete mechanical exhaust, system which would entirely disregard the existing exterior openings. **Tabled at the request of the proponent till the October meeting.**

New Variances:

13-10-1 A **1106 N. Dunn Street – Bloomington – Windows**

The 1987 1 & 2 Family Dwelling Code calls for the emergency escape and rescue windows to have a maximum sill height of 48", a minimum clear opening area of 4.75 sq. ft., a minimum clear opening height of 24" and a minimum clear opening width of 18". The current windows are openable to a clear area of 6.2 sq. ft., have a opening height of 32", a clear opening width of 28" and a sill height of 50" in the basement bedroom, the sill height in the west bedroom is 50", the sill height in the basement east bedroom is 49.5" and the west bedroom has a sill height of 50". The inspection paperwork from HAND advised this would fall under the 1990 1 & 2 Family Dwelling Code which went into effect in November of 1990, which is the year the structure was built. That is the reason the code was change to the 1987 code.

13-10-2 C **Rock Run Repair – New Building – Millersburg** Project #364245

The emergency egress illumination will not be provided as required by code. The proponent advises that this is an Amish owned facility and only operates during natural daylight times. All electrical supplied to the building is from an onsite generator and supplying the building with emergency power is not possible when the generator is not running. The building is not occupied in times of darkness. The hardship would be that the emergency lighting would need to operate for up to 12 hours on battery backup each day causing the batteries to need to be replaced constantly. The CDR shows that this is an F-2 of Type II-B construction and the plans show that it is 20,000 sq. ft. There is no mention of the use of electrical lighting for the facility during the day when it is open. There is no mention of exit signs and if they have battery backup.

13-10-3 AI **Spring Hills Suites – Bloomington**

Kone EcoSpace Elevators with the capacity of 3,000-5,000 pounds will utilize 8 mm steel wire rope suspension cables and a 6 mm steel wire rope governor cable in lieu of the codes requirements for cable sizing. The current code requires a minimum diameter of

9.5 mm. The proponent advises that they will provide additional training, if requested by the State of Indiana, including rope gauges to each elevator inspector.

13-10-4 AI **Timber Ridge – 591 Graham Place – Bloomington – Windows**
The code requirements for minimum size for emergency escape windows was not complied with when the house was constructed in 1983 and will not be brought into compliance at this time. The 1980 Indiana 1 and 2 Family Dwelling Code required that the emergency escape windows have a minimum openable area of 4.75 sq. ft., a minimum clear width of 18", a minimum clear height of 24" and a maximum sill height of 48". The current windows have an existing area of 4.89 sq. ft., an existing openable width of 30", an existing openable height of 23.5" in the 2nd floor center bedroom and 23.25" in the 2nd floor south bedroom and a sill height of 31".

13-10-5 I **Corbin Storage**

13-10-6 I **Crowne Point Communities – Private Dining Room – Indianapolis**

13-10-7 I **Gary City Hall – Modernization and Replacement of Freight Elevator – Gary**

13-10-8 B/C **Exide Technologies – Repair Facility Addition – Muncie**
The code required sprinkler system will be omitted in the new repair facility, that is listed as an H-4 occupancy. The proponent advises that the EPA is concerned in the event of a wet pipe sprinkler discharge, the lead dust and particles, as well as sulfuric acid used in the facility, may create additional hazardous issues with both the new and existing facilities. The proponent advises that they will provide an additional third egress from the repair room facility. They will construct a 4 hour fire wall on three sides, separating the new addition and existing building and will provide an additional two fire extinguishers within the repair room facility. The hardship is the cost of the sprinkler system. The EPA has set forth guide requirements regarding the permissible limits for this type of facility. Excide is electing to provide the addition of an attached repair facility in order to mitigate the escape of hazardous materials (lead particles, lead dust, and sulfuric acid fumes) from the facility. The flowing of water over the equipment will cause reaction with the acid as well as create hazardous issues with the lead dust and particles which cause them to leach into the ground, against EPA requirements.

13-10-9 CI **Sabic IP Project – Mt. Vernon**
The code required fire resistance rated assemblies will not be provided for hatches and there will be unsealed through penetrations of fire rated horizontal assemblies on the new unoccupied open process equipment support structure. The proponent advises that this project is an open sided, unoccupied three level structure to only support process related vessels, equipment and systems. It is an unoccupied structure with no permanent workstations. Activity involved with this process structure will be limited and controlled, periodic visits by trained and able bodied personnel with appropriate personal safety

equipment for service and maintenance only. The levels themselves are only for equipment support and access. The structural elements and components will be of Type I-B construction. The hardship is since this is an unoccupied and open sided structure,, and because of the size and nature of the process vessels, equipment and associated piping, power and control systems, it is technically impractical and costly to effectively try to seal horizontal penetrations through the equipment access platform levels.

13-10-10(a)(b) **Phi Kappa Psi – Fraternity House – Bloomington** Project #366021

B/CI (a) *New sleeping lofts will be constructed and the access to them will be by a noncompliant ladder.* The ladder will not meet the stair requirements of the code. The proponent advises that the building is fully sprinklered. A guarded sprinkler will be provided in the loft area. The loft area will be provided with a guardrail and slopped ladder. The proponent advises that they have done considerable study of the different types of loft installations and the problems that have occurred in some of those installations and feel that this is the best and safest way to proceed with this type of installation.

B/CI (b) *The new sleeping loft installations will not meet the ceiling height requirements of the code above the lofts.* The measurements for the heights above the loft are not provided on the drawings submitted. The drawings show a sloped ceiling being higher in the back of the loft area than in the front ladder locations. There is a sprinkler provided in the loft area and a guardrail with sloped ladder.

13-10-11 C **Earlham College – Science Addition – Phase 2 – Richmond**

The code required egress enclosure will not be provided for the 3 story egress stair that leads from the 1st to the 3rd floors from the 1st floor lobby. The proponent advises that the 3rd floor and 2nd floor levels go through a vertical opening which is open to the 1st and 2nd floors only. To limit the extent of this vertical opening, the stair will be separated from the 3rd floor level by a 1 hour fire barrier, with a sprinkler wash over portions of interior glass windows, per Exception 1 of the 2006 IBC Section 404.5. There are other additional measures to protect occupants in an attached document. The attached letter advises that the new addition will be attached to the existing 48.597 sq. ft. Type IIA educational building and the new addition is a three story, 41,647 sq. ft. Type IIB building. The 3 story open stair within the new addition is an unenclosed stair that serves 3 stories (while connecting only 2) acts as a second means of egress from the 3rd floor. The hardship is that maintaining open views and communication between the floors is important to the function of the building.

13-10-12 B **Edelweiss Horse Park – Greenfield** Project #365326

The code required items from Table 29 will not be provided in the barn. The barn is a wood and concrete structure with a gravel/ag lime floor. Installation of the plumbing items and keeping them from freezing would be cost prohibitive for the nonprofit seasonal operation. There will be bottled drinking water available to the public. Bottled eye wash will also be available with the first aid kit. Hand sanitizer and sanitizing wipes will be available for hand washing. There will be a handicapped accessible porta-pot available to the public as well. The proponent advises that this is an assisted therapy center that is a nonprofit organization. The fees paid by the individuals pay for riding

cover less than 1/3 of the cost of operations and the balance of the expenses are paid by donations and fund raising. The expense of the plumbing facilities is not in the budget and would be detrimental to the facility.

13-10-13 B/CI **Tippe River Downs Senior Patio Homes – Warsaw** Project #363542

The code required NFPA 13R sprinkler system will not be installed in these patio homes. The proponent advises that they will install a 13D sprinkler system in each unit and there will be a one hour separation between each of the 8 units from the slab to the roof sheathing. The plans show that there are 10 buildings being built in this part of the development, each having 8 units. The plans show that there is either more development to come or has already been done. The residential units are for seniors 55 and older and are rental units. They state that there will be 9 units but 10 are highlighted on the plans. The hardship is the cost difference between an NFPA 13R system and an NFPA 13D system. They indicated that the difference would be approximately $4,000.00 per building, not counting the larger water service that would be required.

13-10-14(a)(b) **Boone County 4-H Fairgrounds – Restroom and Pavilion – Lebanon**

Project #363627

BI (a) *The code required service sink will not be provided for in the new shelter house.* The proponent advises that this building is a family picnic shelter. There are several mop sinks provided throughout the fairgrounds, the closest one is located in the pavilion approximately 105 feet north of the shelter. The mopping is done by the facilities and grounds employees whom already have a process for mopping the facilities in the fairgrounds. For convenience of users of the family picnic shelter a kitchen sink has been provided at the east end of the shelter by the entrances to the rest rooms.

BI (b) *The code required drinking fountain will not be provided for the new shelter house.* The proponent advises that there are drinking fountains located throughout the fair grounds. The closest to the shelter is approximately 70 feet away. The pavilion, which is approximately 105 feet from the shelter contains drinking fountains and a full service kitchen typically selling water and food during large events.

13-10-15 CI **Crop Production Services – Warren** Project #360422

13-10-16(a)(b) **Midwest Technical Institute – Brownsburg**

C/DI (a) *The non compliant locking devices will not be removed as ordered by the local fire inspector, which require more than one operation to open.* The proponent advises that these devices are never locked and therefore would never need to be unlocked. The proponent further advises that the exposure to active shooter scenario would leave the students, faculty and visitors without a secure means by which to defend themselves from harm. They advise that in a lock down situation only the responding law enforcement agency will unlock the locks. The hardship is the estimated costs to remove and put on new devices, which is estimated at $70,000.00 to $90,000.00. These locking devices in accordance to the pictures are a combination locking door handle and a dead bolt lock.

C/DI (b) *The non compliant locking devices will not be removed as ordered by the local fire inspector, the devices which cause the user to grasp, pinch or twist to unlock.* The proponent advises that these devices are never locked and therefore would never need to be unlocked. The proponent further advises that the exposure to active shooter scenario would leave the students, faculty and visitors without a secure means by which to defend themselves from harm. They advise that in a lock down situation only the responding law enforcement agency will unlock the locks. The hardship is the estimated costs to remove and put on new devices, which is estimated at $70,000.00 to $90,000.00. These locking devices in accordance to the pictures are a combination locking door handle and a dead bolt lock.

13-10-17 CI **City Way YMCA – Indianapolis**

The new structure of Type II-A construction will have exposed steel roof structure and columns over the gymnasium, fitness and swimming pool areas that are less than the code allowed 20 feet from the floor below. The code requires that the roof structure and columns be protected by one hour fire proofing. The proponent advises that the building will be protected with an automatic sprinkler system per the 2010 Edition of NFPA 13. The sprinkler system design will be increased to ordinary hazard Group I density and spacing (from light hazard) over the area where the roof is less than 20 feet above the floor directly below. There will also be additional sprinklers provided to wash the non-rated columns and limit the temperature exposure from fire. The hardship is the cost and difficulty to provide and maintain the fire proofing on the exposed steel roof structure.

13-10-18(a)(b) **Kingdom Hall of Jehovah's Witnesses – Martinsville** Project #365887

C (a) *The code required vestibule will not be provided in this new building.* The proponent advises that the front doors open up into a foyer of approximately 2,400 sq. ft. that is separate from the auditorium and that area is a contiguous conditioned space. The HVAC units are zoned in the building and the foyer and restrooms have a separate system. The hardship is the area potentially required for vestibule is commonly used for elderly to sit while waiting for rides after meetings. It is important for them to be able to do so while continuing to associate with friends and family. The vestibule would take this area away.

C (b) *The code required fire sprinkler system will not be provided for the R-2 portion of the building.* The proponent is offering to install a smoke detection system to the R-2 space to replace the required suppression system. The building site was purchased and the building released by the State in 2008 without fire suppression. The hardship is the cost of an increase of approximately 15% of the cost of the building, for the holding tank and booster pump that is needed to supply the required sprinkler system.

13-10-19(a)(b)(c)(d) **Penn Street Tower – Indianapolis**

CI (a) *A 2 hour fire barrier and 2 our horizontal assembly will be used to define separate buildings for the purpose of the Chapter 34 evaluation.* The proponent advises that the areas defined by the separation in question will be considered separate buildings. The project involves the conversion of the 15 story original 1910 high rise building from office use to apartments. The project will also include the basement level only of the adjacent 7 story "annex" structure (added some time later). Floors 1 through 7 of the

annex will remain vacant and unused until a new tenant can be found. The project area will be protected throughout with an automatic sprinkler system. A sprinkler system exists in the annex structure. The entire structure is Type IB construction – a fire wall is not required to separate construction types. The hardship is that the separation from the annex structure is needed due to not having a present use for the floors 1 through 7 of the annex and upgrades to the annex will be necessary prior to the occupancy by any tenant.

CI (b) *The code required 1/3 of the diagonal for the separation of exits will not be provided on floors 9 through 15.* The exits will have approximately 30% of the overall diagonal of the floor area. The building will be protected throughout with an automatic sprinkler system per NFPA 13. The maximum travel distance on each of the floors 9 through 15 will be approximately 108 feet and the code permits 250 feet. The building is provided with a fire alarm system throughout. The corridors on the residential floors will be 1 hour rated as required for "R" occupancies. The new exit stair to be constructed within the existing building cannot be moved incrementally to meet the 1/3 diagonal rule with respect to the location of the existing stair due to the structural bay layout of the existing building.

CI (c) *The new elevators to be installed within the existing hoistways will open directly into the existing (reconfigured) stair enclosure which is not allowed per Section 1020.1.1.* The proponent advises that the stairs are not currently enclosed with fire rated enclosure but as part of this project the enclosing of the stairs for the full height of the building with a 2 hour enclosure, including discharge to the exterior at the 1st floor level is planned. The hardship is that the existing elevator/stair lobby is a historically significant element of the building and several historic features in this area will be restored as part of the project. Moving the stair and/or elevator locations would prevent this preservation of the historical character of the lobby. Attempting to create a separation between the elevators and the stair would present functional difficulties in the use of the space by the tenants.

CI (d) *The new elevator will be installed in the existing hoistways serving the 15 story residential tower and will not be sized to accommodate a stretcher as required by code.* The code requires that at least one elevator be able to accommodate a 24"X84" stretcher in a building of 4 stories or more where elevators are provided. The proponent advises that the cabs will be sized to comply fully with the car dimension requirements of Section 407.4.1, ICC/ANSI A-117.1. The upgrade will include compliance with all signal, control and access requirements of Section 407. The building will be protected throughout with an automatic sprinkler system. The hardship is that the existing elevator/stair lobby is a historically significant element of the building and several historic features in this area will be restored as part of the project. Enlarging the existing elevator hoistway construction would prevent the preservation of the historical character of the lobby, whereas attempting to relocate the elevators would present functional difficulties in the use of the space by tenants.

13-10-20 CI **Noblesville East Middle School – Noblesville**

One of the proposed additions will impact an existing means of egress and require temporary means of egress provisions during construction that will not comply with certain rules for new construction. The project includes 2 separate classroom additions and will convert the building from the Freshman Center to the East Middle School. In Section 1411.2, exception, IFC , states that approved temporary means of egress systems

and facilities, may be provided during construction. Temporary egress provisions will be provided as indicated on the drawings. Exit lighting and signage will be adjusted as necessary to accommodate the planned modifications to the egress system. The hardship is that it is not feasible to vacate the affected areas of the building during construction, or to maintain use of the existing egress features in their current configuration during construction.

13-10-21 C **Bulk Lime Storage Tenant Sprinkler – Indianapolis**

In an existing multi-tenant warehouse facility a tenant that stores 16,000 tons of lime has shut off the sprinkler system for the area storing the lime, which is not allowed by code. The proponent advises that the remainder of the area is still protected with sprinklers throughout. The building is of Type IIB construction, the total tenant space is 130,000 sq. ft. The tenant space is provided with an automatic sprinkler system throughout except for the area of this tenant. The lime storage produces a considerable amount of noncombustible dust throughout the space. The sprinklers are not protected and lime dust accumulates on the entire sprinkler. Sprinklers with large amounts of lime dust would be rendered useless. The nonsprinklered area is separated from the sprinklered area with masonry and drywall construction. There is one end loader driver and one worker in this area at any one time. Lime is considered noncombustible and there is not fuel that would activate a sprinkler. This space would be considered a low hazard S-2 occupancy. The hardship involves the operation renders the fire suppression system useless and no fuel load to activate the sprinklers.

13-10-22(a)(b) **Noblesville High School – Noblesville**

CI (a) *The proposed additions will impact the existing means of egress and requires temporary means of egress provisions during construction that will not comply with certain rules for new construction.* The project includes an auxillary gym addition and a freshman center addition. The gym addition will require temporary enclosures through a small section of the construction in 2 locations, whereas the freshman center addition will close off 2 exterior exits during the construction requiring egress re-routing to other remaining exterior exits. The code allows for approved temporary means of egress systems and facilities during construction. This temporary means of egress provisions will be provided as indicated on the drawings, which have not yet been provided. Exit lighting and signage will be adjusted as necessary to accommodate the planned modifications to the egress system. The hardship is that it is not feasible to vacate the affected areas of the building during construction, or to maintain use of the existing egress features in their current configuration during construction.

CI (b) *The code allowed egress travel distance will be exceeded from a number of classrooms during construction, code allows up to 250 feet and the distances will range from approximately 270 to 280 feet.* The proponent advises that the building will be protected with an automatic sprinkler system, with automatic sprinkler protection extended throughout the new additions. A new enclosed egress stair will be provided to serve the existing 2nd floor. The hardship is that due to the size and shape of the existing building it is not feasible to reduce travel distance in the existing building to 250 feet.

13-10-23 AI **520 Graham Place – Bloomington – Windows**
The code in effect in 1980 when the building was built required a clear height of 24 inches in the emergency escape windows. The current window has an existing height of 23.5 inches.

13-10-24 CI **Kokomo Central Middle School – Renovation – Kokomo**
The proposed renovation of the 2 story 1970's section of the existing building will be completed in several phases concluding in 2016, including a sprinkler protection in each phase. The variance request is to permit phasing in of the sprinkler installation and to permit each phase to be designed in view of a fully sprinklered building, including nonrated corridor construction and a new 2 story floor opening. The proponent advises that these features depend on a fully sprinklered building. Each phase will be protected with automatic sprinklers prior to occupancy upon completion of the renovation of that phase of the project. Phasing of the sprinkler system installation will not be adverse to safety. Each area with renovation taking credit for sprinkler trade-offs will be protected with sprinklers as part of the renovation. The hardship is that it is not feasible to provide sprinkler protection throughout the project area at one time due to the necessary phasing of the project. Students are being relocated during the course of the phased in order to accommodate the renovation of each area.

13-10-25 CI **Elanco Global Headquarters – Expansion - Greenfield** Project #358775
Aluminum store front doors have been used in lieu of the code required 1 ½ hour rated assemblies in two fire walls, acting as horizontal exits. The walls are between a new cooperate dining facility (A-2) and two adjacent cooperate headquarter buildings. The proponent advises that the building is protected throughout by an automatic fire suppression system per NFPA 13. Close spaced sprinklers will be placed on both sides of each non-rated assembly location at no more than 6 feet on center and no more that 12 inches from the surface of the glazing. The cafeterias specifically, as well as the office buildings, have multiple locations of egress, and capacity that exceeds code requirements. The doors will be self closing with electronic hold opens wired to the fire alarm system. The hardship involves the desire to have a corporate setting to their cafeteria with more glazing in the doors leading in the area.

13-10-26 CI **Wayne Township Golf and Cross Country Building – Indianapolis**
The proposed one story structure will not be designed to comply with the Energy Code, based upon intermittent and seasonal heating of portions of the structure and the comcheck report will not be submitted since the project cannot pass comcheck. The proponent advises that the building will be used for storage of the high school golf and cross country equipment and for intermittent use by teams for meetings. The building will also have an overhang for the tee area for the outdoor driving range. A dusctless split system heat pump will be installed in the main golf room, and small heaters and toilet exhaust in the rest rooms. The building will be shut down during the winter, with minimal humidity control during the summer shutdown. The storage areas will not be conditioned. Due to the small size of the building and very minimal and intermittent energy usage, the proponent does not believe the lack of compliance with the energy code will not be adverse to the public welfare. The hardship is the cost to provide a fully

compliant design to meet the IECC for a building that is not fully conditioned. What is the size of the building? What percentage will be conditioned?

13-10-27 CI **Jay-Randolph Development Services Dock Enclosure – Portland**
The opening between the I-4 and dock area will be 63% of the length of the wall and code permits a maximum opening of 25% on the length of the wall. The 225 Sq. ft. dock area will be added to existing I-4 occupancy of 13,154 sq. ft. and will be separated by a two hour fire barrier so as not to increase the existing I-4 occupancy fire area. The proponent advises that the addition is only 1.7% of the existing building. The hardship involves the cost to extend the 2 hour fire barrier an additional 36 feet to comply with the code.

13-10-28(a)(b)(c)(d)(e)(f) **10 North – Mixed Use – Bloomington** (<u>The Fire Department has advised that they are opposed to all of these variances.</u>)

BI (a) *The clothes dryers exhaust vents lengths on the residential floors will exceed the code permitted 25 feet.* The proponent advises that the project is comprised of a 4 story Type VA apartment structure constructed over a 1st floor Type IA building that includes a parking garage, business, retail, or potential restaurant. The dryers will be installed throughout the project with exhaust systems that have the published capacity to provide adequate airflow to match the necessary lengths. The hardship is the location of the clothes dryers does not provide the capability of meeting the maximum 25 feet equivalent length.

CI (b) *The covered parking area on the 2nd floor level (1st floor of the upper Type VA building) will not be located in a building of Type I, II, or IV construction. The covered parking (open parking garage) will in effect be considered part of the Type VA building.* The proponent advises that the parking deck will be a 3 hour rated horizontal assembly of noncombustible construction. The floor construction above the covered parking garage will be 1 hour rated, as required. The covered parking is open to the exterior, with openings as required for an open parking garage level. The hardship is the cost to provide a complete enclosure for the covered parking area as part of the Type I building below. What type of sprinkler system will be provided for this parking garage? With the propensity of the fuels used in vehicles accelerating the fire and its intensities, is the use of a 1 hour fire barrier going to be able to withstand this extra amount of heat to protect the residential structures above this garage, especially to allow them to escape considering they must go through the fire floor to get out of the building?

CI (c) *The 4 story R-2 occupancy building of Type VA construction to be constructed over the 1 story Type IA podium building will be protected by an NFPA 13R sprinkler system.* An NFPA 13R system is permitted in buildings up to 4 stories in height, if considered as a single structure, the entire structure is 5 stories in height above grade. The hardship is the cost of providing a full NFPA 13 sprinkler system in the 4 story R-2 occupancy building, due primarily to the requirement to provide sprinkler protection within the attic and open web joist cavities. Does this NFPA 13R sprinkler system include the parking garage on the 1st floor of the Type VA construction?

BI (d) *The items in Table 29 will not be provided in this projects parking garage as required by the code.* The items being excluded are emergency showers, eyewash stations, service sink, drinking fountains, lavatories or water closets. The code requires all "S" occupancies to have these items. The covered parking garage area is for parking only

with no repair or other activities justifying the requirement for these type fixtures. Restroom facilities are provided elsewhere as required for other occupancies. The hardship is the cost for plumbing fixtures which do not provide any benefit to the public welfare.

CI (e) *The total height of the building will be approximately 63 feet from grade to the average height of the roof surface and the code only permits the height to be a maximum of 60 feet, to allow the use of the NFPA 13R sprinkler system.* The proponent advises that there will be a Class I standpipe system provided throughout the building as required by the code, having a floor level in excess of 30 feet above grade. The upper building is within the allowable area and height in stories permitted by the IBC without the use of an NFPA 13 sprinkler system. The hardship is the need for the clear height of the 1st floor to accommodate the retail components planned. Additional costs of providing a full NFPA 13 sprinkler system is also another hardship.

CI (f) *The area of the 1st, 2nd and 3rd floors of the upper 4 story R-2 occupancy of Type VA construction will exceed the allowable area for a single story by approximately 400 sq. ft. or about 2.5% per floor.* The proponent advises that the total of the 4 story upper floors, as a whole, is within the total area allowed for all stories combined. The hardship is the cost to provide a fire wall to separate the upper building into 2 separate building areas.

13-10-29 CI **IU Health – Bedford Hospital – Modular MRI – Bedford**

An addition of approximately 900 sq. ft. will be added to the existing hospital, which is already over area permitted by the code and a structurally independent fire wall will not be provided to separate the structures. The proponent advises that the existing building of Type IIB construction is fully sprinklered. The new addition for the MRI unit is approximately 900 sq. ft. and will be built of Type I-B construction and will also be fully sprinklered. The modular MRI will be separated from the existing building with a 2 hour fire barrier. The means of egress through the existing hospital building, the modular MRI will have an exterior exit door directly at grade. The hardship is that the MRI unit is of a higher construction type than the hospital and the occupants are not required to exit through the hospital since there is an exit directly to grade from the MRI unit.

13-10-30(a)(b)(c) **Winchester Middle School – Winchester**

CI (a) *The unseparated middle school administrative/entrance addition of 3,066 sq. ft. plus the area of the existing high school building of 126,492 sq. ft. will exceed the current code allowable are for Type IIB construction.* The project involves the construction of a new middle school addition to the existing 1967 high school building, including a separate entrance and administrative area. The building will be classified as "E" occupancy with accessory assembly uses and Type IIB construction. The addition will be protected throughout with an automatic sprinkler system – automatic sprinkler protection will be extended into the adjacent high school administration area which will be partially renovated to gravity load bearing elements. The structure of the addition will be independent of the existing building structure with respect to gravity load bearing elements. Due to the nature of the interface of the addition with the existing building, it is impractical to provide a rated separation for the addition.

CI (b) *The egress corridor in the new middle school administrative area (and connected to the existing high school administrative area) will not be fire rated, as required by code.*

The corridor is required to be fire rated based upon the construction occurring within an existing building not protected throughout with an automatic sprinkler system. The proponent advises that the new middle school administrative area and the renovated existing high school administrative area will be protected with an automatic sprinkler system. The system will protect the corridor and all rooms using the corridor as a means of egress. The maximum egress travel distance from the administrative area will be approximately 90 feet, code permits up to 200 feet. The hardship is providing door closers on the doors in the administrative area is an operational hardship, and difficult to maintain.

CI (c) *A 2 hour fire barrier will separate the new 2 story middle school addition of 30,491 sq. ft., from the existing high school facility in lieu of a structurally independent fire wall.* The new middle school facility will be added to the existing 1967 high school building of 126,492 sq. ft. The building is classified as and "E" occupancy with accessory assembly uses, and is of Type IIB construction. The proponent advises that the addition will be protected throughout with an automatic sprinkler system. The structure of the addition will be independent of the existing building. The hardship is the cost to create a separate structurally independent fire wall for the 2 story addition. What is the cost to comply?

13-10-31 CI **Remodel of 1434 E. Third Street – Bloomington** Project #366553

The code required sprinkler system will not be provided for an A-2 occupancy that will have an occupant load in excess of 100. The remodel is of an area that was an existing restaurant and will be attached to the current restaurant to expand the area of the structure. The fire area will be less than 5,000 sq. ft. and occurs on the level of exit discharge. The expanded space was previously a restaurant. An evaluation of the building using Section 3410 of the IBC reveals that the building achieves a passing score without an automatic sprinkler system. The project could not be filed under Section 3410 since there is not a change of occupancy. The current remodel project is approximately $80,000.00. The addition of an automatic sprinkler system would represent a significant portion of the overall budget. The hardship is the unreasonable cost in light that the facility is expanding into an existing restaurant space.

13-10-32(a)(b)(c) **Winchester Community High School – Additions – Winchester**

CI (a) *The proposed additions will impact the existing means of egress and require temporary means of egress provisions during construction that will not comply with certain "rules for new construction".* The application advises to see the attached drawings and narrative but none was provided. The project includes an auxillary high school gymnasium addition, a high school science classroom addition, and a middle school addition to the existing high school. The building is classified as an "E" occupancy of Type IIB construction. The proponent advises that exit lighting and signage will be adjusted as necessary to accommodate the planned modifications to the egress system. The hardship is it is not feasible to vacate the affected areas of the building during construction, or to maintain use of the existing egress features in their current configuration during construction.

CI (b) *The area of the existing building (126,492 sq. ft.) plus the unseparated addition of 974 sq. ft. providing interior ramp access to the new auxillary gym will exceed the current code allowable area for Type IIB construction.* The proponent advises that the addition

is less than 1% of the existing building area, and will be used for pedestrian movement between the existing school facility and the new gym. The ramp addition, as well as the auxillary gym addition will be protected throughout with an automatic sprinkler system. The hardship is that the ramp is needed to provide an accessible route between the existing building and the auxillary gym addition die to construction at a different elevation.

CI (c) *A 2 hour fire barrier will be used to separate the auxillary gym addition (16,106 sq. ft.) and the science addition (9,698 sq. ft.) from the existing building in lieu of a structurally independent fire wall, as required by code.* The proponent advises that the additions will be protected throughout with an automatic sprinkler system. The structure of the additions will be independent of the existing building. The additions exit to the exterior without passing through the existing building. The hardship is the cost to create a separate structurally independent fire wall for each addition.

13-10-33 CI **Strawtown Interpretive Park – Koteewi Park – Noblesville**

Replica Native American Indian structures will be erected in the interpretive park and will not comply with certain rules applicable to the Commission for Class I structures. The structures are considered to be Class I structures due to the intermittent occupancy by the public, visitors to the park. Recent archeological discoveries on the site have detailed information of native Indian settlements on the site dating back to 1200 – 1400 A.D. that will permit historically accurate replica structures to be constructed. The proponent advises that there will be 3 separate types of structures; a "community structure" approximately 20' X 28' in size, a smaller "daily life" structures approximately 20' X 24' in size and small "bent pole" structures oval in shape, no size given. The application advises to see attached preliminary drawings and description of applicable issues but none was provided. The imposition of the rules of the Commission in all respects would hinder the purpose of the exhibits, which is to provide an historically accurate depiction of early native Indiana life.

13-10-34 CI **Ivy Towns and Flats – West Lafayette** Project #367126

The code required deeded property lines will not be provided for the 17 townhouse units that have been designed in accordance with the Indiana Residential Code. There is an Indiana Amendments in both the IRC and IBC that requires the property lines. The townhouses are located in 4 unit and 3 unit structures. The proponent advises that the townhouses will be separated by a 2 hour separation wall as required in Section R317.2 of the IRC. The townhouse units will otherwise comply with all applicable IRC requirements. The hardship is the placement of the deeded property lines creates the requirement to isolate all utility elements for each unit, increasing the cost of the project. Additionally, the process of recording deeded property lines is not a simple process logistically from a local regulatory standpoint.

13-10-35 AI **McDonald's – Union City – ACI 12047** Project #366312

The code required sprinkler system will not be provided for the renovated A-2 restaurant with a calculated seating capacity exceeding 100. The playland center will be removed and replaced with storefront dining in the existing building area of 4,228 sq. ft. The code requires sprinklers in A-2 occupancy's in excess of 5,000 sq. ft. or occupant loads in

excess of 100. The is no addition to this building however state plan review requires an additional area for cuing and recalculation of the occupancy load which is more than 100. The code of record allowed an occupant load of 300 before sprinklers were required. The proponent advises that the travel distance from the public area does not exceed 40 feet. There are 2 separate exits provided from the dining area and an additional exit is provided from the employee areas. The building size is less than 5,000 sq. ft. and the fixed seating in the dining area is 82. The hardship is that the modification and the removal of the playland center does not increase the risk to the patrons of the business. Dividing the kitchen, service area or seating area with a fire wall is not easy to accomplish within the existing building and would not significantly improve safety of occupants.

13-10-36 CI **Angie's List - Yellow House – Change of Use – Indianapolis**

The building being evaluated for a change of use through Rule 13 will exceed the code allowed 3,000 sq. ft. with an actual square footage of 4,314 sq. ft. or 1,314 sq. ft. over the amount allowed. The proponent advises that the building, constructed in the 1880's, was converted from a single family dwelling to an office building (B 0ccupancy). The building is of Type VB construction and is 3 stories. The 1st floor is approximately 1,715 sq. ft., the 2nd floor is approximately 1,661 sq. ft. and the 3rd floor is approximately 938 sq. ft. The proponent advises that they will install an NFPA 13D sprinkler system, which is not required by code. The maximum travel distance from the 3rd floor to the exterior is 101 feet and code permits 200. The travel distance from the 3rd floor, which has two exits is 58 feet and code permits 75 feet. Exit signs and egress illumination will be provided as required by the code. The building will be occupied by staff and is not open to the public. The building will otherwise comply with the requirements of Rule 13. The hardship is the cost to comply with Section 3410 of the IBC. Compliance with Section 3410 would require the installation of a fire alarm system throughout, a smoke detection system throughout and enclosing the stairways with rated construction.

13-10-37 CI **Angie's List - Blue House – Change of Use – Indianapolis**

The building being evaluated for a change of use through Rule 13 will exceed the code allowed 3,000 sq. ft. with an actual square footage of 3,835 sq. ft. or 835 sq. ft. over the amount allowed. The proponent advises that the building, constructed in the 1880's, was converted from a single family dwelling to an office building (B 0ccupancy). The building is of Type VB construction and is 3 stories. The 1st and 2nd stories are approximately 1,450 sq. ft. and the 3rd floor is approximately 935 sq. ft. The proponent advises that they will install an NFPA 13D sprinkler system, which is not required by code. The maximum travel distance from the 3rd floor to the exterior is 82 feet and code permits 200. The travel distance from the 3rd floor to the 2nd , which has two exits is 68 feet and code permits 75 feet. Exit signs and egress illumination will be provided as required by the code. The building will be occupied by staff and is not open to the public. The building will otherwise comply with the requirements of Rule 13. The hardship is the cost to comply with Section 3410 of the IBC. Compliance with Section 3410 would require the installation of a fire alarm system throughout, a smoke detection system throughout and enclosing the stairways with rated construction.

13-10-38(a)(b) **Angie's List - Dorman Building – Change of Use – Indianapolis**

CI (a) *The Section 3410.6.9 evaluation will need to have some of the numbers approved in order to pass the evaluation, the variance request is to permit a score of +9.2 in lieu of 0.0 for "fire alarm system" in the Fire safety Column, 3.7 in lieu of 0.0 in the Means of Egress column, and 3.7 in lieu of the 0.0 in the General Safety column, for a total of 23.1 points.* The proponent advises that the existing building is comprised of two buildings. There is a front and back building that are connected in the middle at the 1st floor. The building constructed in the 1880's was converted from an auto repair shop/dealership (S-1/B occupancy) to an office building is approximately 3,422 sq. ft. and the second floor is approximately 3,335 sq. ft.. The 1st floor on the back building is approximately 3,472 sq. ft. and the 2nd floor is approximately 2,450 sq. ft. The proponent advises that there will be a fire alarm system added to the building as part of the change of use. The maximum travel distance is 100 feet from the 2nd story and code allows 200 feet. The building constructed in the 1880's is very open with ceilings approximately 12 feet high. Cubicles are used in this space and the exits are readily seen. The hardship is that to get a passing score using Section 3410 a new automatic sprinkler system is accordance with NFPA 13 would have to be provided throughout the entire building. This would render the change of use economically infeasible and the building would be abandoned.

CI (b) *The building will be evaluated under Section 3410 in lieu of compliance with all of the requirements for new construction. The variance request is to permit a score of 0 in lieu of -14 for vertical openings.* The proponent advises that the existing building is comprised of two buildings. There is a front and back building that are connected in the middle at the 1st floor. The building constructed in the 1880's was converted from an auto repair shop/dealership (S-1/B occupancy) to an office building is approximately 3,422 sq. ft. and the second floor is approximately 3,335 sq. ft.. The 1st floor on the back building is approximately 3,472 sq. ft. and the 2nd floor is approximately 2,450 sq. ft. The building is Type IIIB construction and 2 stories. There are three exits from the 2nd floor of the front building. One is an unenclosed stair. A second is an exterior stair that is half a story down from the 2nd floor. The third is an exit onto the roof that connects to the back building. There are three exits from the back building. One is unenclosed stair. A second is an exterior stair. The third is an exit onto the roof that connects to the front building. A fire alarm system will be added to the building as a part of the change of use. The maximum travel distance is 100 feet from the second story, and code permits 200 feet. The hardship is that it is cost prohibitive to enclose one of the stairs and have is discharge to the exterior. Exterior stairs were added to the front and the back building which comply with current code for ris, run, etc. These stairs function like an enclosed stair getting occupants out of the building without having to travel through the 1st floor to reach an exit.

13-10-39(a)(b) **Mainstreet South Bend Skilled Nursing and Assisted Living Facility – South Bend**
Project #364235

CI (a) *Side swinging doors will not be installed in the restrooms in the patient rooms and instead will have sliding doors installed in all patient rooms which is not code compliant.* The proponent advises that the occupant load of the room shaving the sliding doors will be less than 10 people. The building is sprinklered throughout. The 2012 IBC permits

manual sliding doors in a means of egress from spaces with an occupant load of less than 10. The hardship is that the use of sliding doors allows the room to be designed more efficiently, because of more efficient use of the unusable square footage.

CI (b) *The variance request is to allow the 2nd nurses work area to be open to the corridor, in the assisted living facility, I-1 occupancy and the code requires that the corridors be 1 hour rated fire resistive construction and does not permit them to be interrupted by intervening rooms except for foyers, lobbies and reception rooms.* The proponent advises that the 2 story building is Type VA construction. The 1st floor is a nursing home, I-2 occupancy, and the 2nd floor is assisted living I-1 occupancy. The building is protected throughout with an automatic sprinkler system. The entire I-1 occupancy is protected with quick response sprinklers. Smoke detectors are tied to the fire alarm system and will be provided in common areas, nurse areas and nurse's work room which are open to the corridor. The I-2 occupancy is divided into 2 smoke compartments/fire areas. Area A is 8,220 sq. ft. and Area B is 12,834 sq. ft. The I-1 occupancy is separated from the I-2 by 2 hour construction. The maximum travel distance is 143 feet to a 2 hour enclosed exit stair that discharges to the exterior. The facility is NFPA 101 compliant and is licensed.

13-10-40 C/D **Snider High School – Renovations – Ft. Wayne** Project #364962

The automatic sprinkler system will be installed within the entire existing building over several phases and the sprinkler system will not be immediately operational upon completion of each phase, but will be operational as sequence of construction permits. The proponent advises to see the attached letter to see the rationale for the sprinkler phasing. Construction within the existing building that will depend upon a fully sprinklered building includes replacing existing fire rated corridor doors with nonrated doors, permitting open egress stairs, and not providing fire dampers at duct penetrations of corridor walls. The project involves the phased renovation of approximately 390,000 sq. ft. of building area over a 2 year time period, with the project completion scheduled for August 2015. The project includes new MEP systems, accessibility upgrades, replacement of doors and windows, and new architectural finishes throughout. The sprinkler system will become operational in each sprinkler zone upon completion. The building is not currently sprinkler protected. Each phase completed will increase the level of safety in the building. The sprinkler zones do not coincide with project phases, and as explained in the attachment sprinkler piping is installed in such a manner as to not overload existing structural members. Students will be relocated during the course of the project in order to accommodate renovation of each phase in sequence.

13-10-41(a)(b) **Graeters Ice Cream Shop – Indianapolis** Project #366603

NVR/AI (a) *The City of Indianapolis has cited the project for lack of a parapet wall due to proximity to the property line.* The new portion of the existing exterior wall that is being replaced, will be rebuilt with a 2 hour CMU wall, the rest of the existing exterior walls are to remain the same. The existing walls to remain are non-combustible brick veneer. The hardship is the fact that the majority of the existing wall is not being removed or replaced and will remain as is. Additionally this is a pitched roof and building a new parapet wall will create water damning issues and other roof drainage challenges. According to the information that has been supplied this appears to be a repair and not new construction and therefore is not required to follow today's code.

NVR/AI (b) *The City of Indianapolis has cited the project for lack of a entry vestibule.* The proponent advises that this structure is 2,150 sq. ft. which is less than the 3,000 sq. ft. required in the Energy Conservation Code and therefore would not require the vestibule. There has also been an interpretation by the Commission that the proponent advises was published on August 10,2011 of 675 IAC 12-4-12(j) stating that change of use or alterations to building built prior to January 21, 1978 are not required to comply with the energy code. The building was originally built before 1978. The hardship in complying with the request of the City of Indianapolis is the code does not require such a vestibule and the space required to provide a vestibule and the cost of construction. With the information provided this size of the building does not require a vestibule.

13-10-42(a)(b) **Illinois Place – Indianapolis** Project #361282

CI (a) *Dryer vents located on the exterior wall of the building are in some cases located less than 3 feet from openable windows, which is not allowed by code.* In most of the cases involved in the request, the distance is too close to windows below the vent in question, approximately 28 inches. The project involves the construction of several 3 story apartment buildings with a total of 50 units. The proponent advises that in the cases involve vents that are located above the windows in question, there will be very little risk in exhaust entering the building. The building is fully air conditioned. The windows in question will likely be open only intermittently and infrequently. The hardship is the vent locations were dictated by the maximum length permitted without booster fans. The cost to retrofit the installed vents, including installation of booster fans is estimated at $36,000.00. How many vents are involved? What is the length of the vent runs?

NVRCI (b) *The wheelchair space provided for the roll-in showers has been cited as a "fixture" located within the required clear floor space for the water closet for Type A and B units.* Drawings have been attached displaying the discrepancy. The project involves the construction of several 3 story apartment buildings with a total of 50 units. The proponent cites 2 different codes, advisory 608.1 in the 2010 ADA Standards and ICC/ANSI A117.1 that allow the overlapping in these instances. The hardship is requiring the clear floor space for the water closet to be entirely independent of the wheelchair space for roll in shower would require extensive retrofit of the as built construction, resulting in loss of useable space within the dwelling unit and incurring significant cost.

13-10-43(a)(b)(c) **Stadium Flats – Indianapolis** Project #366428

A/CI (a) *The code required Type A units will not be provided in the 144 unit apartment development.* The units are located in 4 separate 3 story buildings on the site. Type A units are required at a rate of 2% of the total units. The buildings are classified as R-2 occupancy. The proponent advises that the design will comply with a proposed code change included in the LSA document #13-339 that will allow multi-family residential occupancies to be designed per the federal Fair Housing Act in lieu of the IBC. The Fair Housing Act does not require Type A units, only adaptable units, the equivalent of Type B units per the IBC and ICC/ANSI A-117.1. The ground floor units in the development are designed as Type B units. Type B units are useable by persons with physical disabilities per the Fair Housing Act. The development will comply fully with the federal Fair Housing Act and all of the applicable federal standards. The hardship is that Type A

units require larger clear floor space requirements for fixtures, reducing the useable space in units and rendering these units less attractive to the general market.

A/CI (b) *The use of storage shelving has been interpreted previously as a violation in utility rooms containing the washer, dryer and water heater, and an air handler/furnace suspended from the ceiling above.* The fire states that "Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms. A previous variance was approved for the Stadium Lofts project to allow this type of storage. The buildings are classified as R-2 occupancy. The development includes 144 units in 4 separate 3 story buildings on the site. The proponent advises that the shelving is provided to allow for orderly storage of household and laundry items by tenants. The building is protected throughout with an NFPA 13R sprinkler system. The hardship is to not provide the shelving will result in a less safe condition, resulting in haphazard storage in the room.

A/CI (c) *The air conditioning ducts exposed within the units (not concealed above ceilings) will not have seams "sealed with welds, gaskets, mastics (adhesives), mastic plus embedded fabric systems or tapes" which is required by the IMC.* The buildings are classified as R-2 occupancy. The development includes 144 units located in 4 separate 3 story buildings located on the site. The proponent advises that the sealing the seams in exposed duct work within the units does not serve any purpose, as the seams are within the spaces being conditioned. There was a variance approved for the Stadium Lofts project for the same situation. The hardship is that providing seams of the type described would either add significant cost or otherwise defeat the purpose of exposed ductwork, without providing any benefit to public welfare.

13-10-44(a)(b) **The Lofts at Pulliam Square – Indianapolis**

B/C (a) *The code required fire rated separation will not be provided between the existing open parking garage and the truck dock/pharmacy drive through area.* The truck dock/drive through area is an open air exterior space, but is considered part of the Type IA podium building. The outdoor area in question serves as the south entrance to the existing parking garage. The project involves construction of Type VA wood frame apartments over a commercial/retail Type IA structure. The construction will adjoin an existing parking garage of Type IIA construction on the northeast corner of the site. the proponent advises that the Type IA building, including the exterior truck dock/drive through area will be protected throughout with an automatic sprinkler system per NFPA 13. Additionally a sprinkler curtain will be provided along the south wall of the garage at the ceiling of the truck dock/drive through space where the openings from the existing parking garage will occur into the truck dock/drive through area. The truck dock/drive through will be separated from the upper 4 story Type VA residential building with a 3 our floor assembly, as required. A 2 hour fire barrier will be provided between the open parking garage and the 4 story Type VA residential building per approval of variance 13-09-47(a). The hardship is the separation cannot be provided due to the size of the existing openings in the parking garage south exterior wall. Additionally the City has requested that openings be retained near the vehicle exit from the garage for the purpose of pedestrian safety.

C (b) *A roof top terrace amenity with deck level located at 76' ½" above the lowest level of fire department vehicle access, which would put this structure into the high rise building*

and the variance request is to not require the building to be designed per the high rise building requirements, which apply to buildings with an occupied floor located more than 75' above the lowest level of fire department vehicle access. Per the attached drawings the terrace amenity space will include an open air roof deck of 1,266 sq. ft. and an interior area of 862 sq. ft. (stair. Elevator, unisex rest room, wet bar, and storage room). The project involves construction of Type VA apartments over a commercial/retail Type IA structure. The proponent advises that the interior spaces will be provided with automatic sprinkler protection as required. Access to 2 exits will be provided from the terrace, as required. The deck will be constructed of pavers installed over the roof surface, without combustible concealed spaces. A standpipe outlet for the fire department use will be provided at the intermediate level landing on the enclosed stair serving the rooftop terrace. Fire alarm devices, emergency lighting, and exit signs will be provided for the rooftop terrace as required. The hardship is the cost to upgrade the building design will cause the rooftop terrace to be deleted from the project.

13-10-45 BI **Harlan Bakeries – Indianapolis**

The code required 4 hour fire wall between the original bakery and the second bakery that will split the building into 2 separate bakeries will not be provided. The existing 2 story bakery/warehouse facility of Type IIB construction and 402,087 sq. ft. is proposed to have 226,053 sq. ft. sold to a separate bakery company. The sale of this portion of the building will create a property line between the Harlan Bakery and the new contiguous bakery company. The proponent advises that in lieu of the code required 4 hour fire wall they will provide close spaced sprinklers a maximum of 6' on center for the full length of the wall. The close spaced sprinklers will be a water curtain design per Section 11.3.3 in NFAP 13, which requires the system to be hydraulically designed to provide 3 gallons per minute per lineal foot of water curtain, 114 lineal feet of 2 hour fire barrier and 85 lineal feet of new 4 inch metal wall. The sprinklers will be provided on one side based on existing operations making it difficult to impossible on both sides. The build is fully sprinklered. The hardship is the cost of approximately $400,000.00 to erect a 4 hour fire wall.

13-10-46(a)(b) **Lawrenceburg High School – Gymnasium Addition – Lawrenceburg**

CI (a) *The code required 2 hour fire wall will not be provided to separate the new gymnasium from the existing school.* The proponent advises that they will instead provide a 2 hour fire barrier. The addition includes a new competition gymnasium with spectator seating, upper level running track, locker rooms, weight training, wrestling, public restrooms, and other support spaces. The building will be classified as "E" occupancy with accessory assembly uses and Type IIB construction. The addition will be protected throughout with a sprinkler system. The structure of the addition will be independent of the existing building. The addition is provided with multiple exits to the exterior without passing through the existing building. The hardship is the cost to create a structurally independent fire wall for the addition.

CI (b) *Two means of egress stairs connecting 3 levels will not be enclosed with fire resistive construction as required by code for over 2 levels*. The 3 story addition contains a new competition gymnasium with spectator seating, upper level running track, locker rooms, weight training, wrestling, public restrooms, and other support spaces. The building will

be classified as "E" occupancy with accessory assembly uses and Type IIB construction. The addition will be protected throughout with a sprinkler system. The means of egress stair design will comply with the provisions of the proposed new 2012 IBC. The floor opening in each case will be provided with a bulkhead a minimum of 18 inches in depth with a sprinkler curtain along the bulkhead per Section 7-9.7 of NFAP 13. The water curtain is designed to deliver a minimum discharge rate 3 gpm per lineal foot. The hardship is that without this open stair the desired pedestrian circulation between floors will not be enhanced and this will also improve egress flow time. Due to the sloping site the front egress stairs connect to a lower level entry/exit stair.

13-10-47 CI **Westhaven Apartments – Buildings A, B, C, D, & E – Zionsville**

Existing 3 story apartment buildings (A – E) that have all stairs designed as exterior stairs per Section 1023.3 will have the required 35 sq. ft. of aggregate opening closed off with glass, due to bad weather issues, which is not allowed per the code. The railing will be left in place and covered with the glass. The open end of the corridors will remain with ventilation openings. The proponent advises that the building is provided with an automatic sprinkler system throughout per NFPA 13R, the 1999 Edition. Ventilation is provided at the opposing end of the corridors that connect to the stairs with the required 35 sq. ft. of aggregate opening. This provides air circulation for the corridor and stair what would meet the intent of the mitigate smoke. The hardship involves the difficulty of maintaining the stairs and portions of the contiguous corridor during snow and ice events.

13-10-48(a)(b) **Alpha – Brownsburg Schools – Brownsburg**

BI (a) *Time out rooms without free egress will be provided within a school for an alternative educational program geared toward students with behavioral challenges, the inability of the students to freely leave the time out rooms is not allowed by the code.* The proponent advises that the doors remain locked as long as a staff member maintains pressure on a button to lock the student in the room. The code requires free egress from the building – "readily openable from the egress side without the use of a key or special knowledge or effort". The building is protected with an automatic sprinkler system throughout. There will be two video cameras per room, one to monitor the inside of the room the other looking at the door from the outside. When the continuous pressure control button is released the door is free to open. The alternative school program educates students with behavior challenges. At times, for variance reasons, there is a need to isolate a student in these types of rooms. Meeting the requirements of an "I" occupancy is difficult and expensive in an existing school. There have been numerous similar variances for this type of time out room locking devices.

AI (b) *A portion of a school where there is an alternative educational program geared toward students with behavior problems will have doors with delayed egress locking devices of 30 seconds rather than the code compliant 15 seconds.* The program expects to have "runners", and 15 second delay is not enough time to get staff to the door to address the situation. The proponent advises that the building will be protected throughout with an automatic sprinkler system. The doors and locations will meet all of the requirements of Section 1008.1.8.6 of the IBC, including the audible alarm. The relocking of the door will be done manually. The alternative school program educates

students with behavioral challenges. There have been similar variances for this type of delayed locking device times in the past.

13-10-49(a)(b)(c) **City of Kokomo Parking Garage – Kokomo**

CI (a) *The total number of stories and total height in feet of the entire structure will exceed that permitted for the 5th floor residential occupancy.* The code permits 3 stories and 50 feet in height maximum. The actual will be 5 stories and approximately 66 feet as measured from grade plane. The city owned open parking garage will be 4 open parking garage levels plus 5th floor apartments. The apartment level will include lofts within some of the units, but will be designed as complying mezzanines per the IBC. The open parking garage will be a minimum Type IIB construction and the apartment level will be designed as Type VA construction. The structure will be designed with 2 different construction types per Section 509.7 of the IBC. The proponent advises that the open parking garage will be separated from the 5th floor residential level with a 2 hour horizontal assembly supported by a 2 hour structural frame. The 5th floor residential structure will be protected throughout with an automatic sprinkler system per NFPA 13. The egress stairs serving the residential occupancy will be fully enclosed with 2 hour fire barriers and discharge directly at grade. The hardship is the cost to provide a generator for the elevator. There is no need for a generator on the project otherwise.

CI (b) *The elevator will not be provided with standby power backup as required by code.* The code requires that at least one means of egress for 5 story buildings be an elevator provided with emergency power backup. The proponent advises that there will be an area of refuge including a wheelchair space provided at each upper floor landing in each of the 2 stair enclosures. Areas of refuge in stairs or accessing elevators are not required in buildings protected throughout with an automatic sprinkler system or in open parking garages. The stairs will be enclosed with 2 hour fire barriers, as required. The 5th floor residential level will be protected with an automatic sprinkler system per NFPA 13. The provision of area of refuge within stairs on the upper levels will provide an accessible means of egress at least equivalent to an elevator used as an accessible means of egress. A transfer switch will be provided for one of the elevators in order to permit a portable generator to be connected to the elevator. The elevators will have battery backup provided in order to permit the lowering of the elevators in the event of loss of power. The hardship is the cost of the generator for the elevator.

CI (c) *The two elevators will open directly into the fire rated enclosure for one of the egress stairs on each floor level, which is not allowed by code.* The proponent advisees that the elevators will be separated from the stair enclosure with a 2 hour shaft enclosure. As the elevators do not open into any other building area, there is no risk of fire spreading from the building into the stair enclosure via the elevators. The hardship is increasing the size of the elevators\/stair core to provide a separate lobby for the elevator would result in a loss of parking spaces on each level.

13-10-50(a)(b)(c)(d)(e)(f)(g) **Senior Apartments at the Anderson YMCA – Anderson**

CI (a) *Section 3410 will be used during the evaluation of the existing 4 story YMCA being partially changed into R-2 occupancy even though part of the floors were removed and will be reinstalled, which this is not allowed to be done for a Chapter 34 analysis.* The proponent advises that the 1st floor and basement will remain the YMCA. The rest of the

building, 2nd, 3rd, &4th floors, will be made into apartments. As part of the renovation approximately 10,000 sq. ft. will over three stories will be reinstalled into the current approximately 70,500 sq. ft. over 4 stories due to reconstructing floor area previously removed during the 1980's. The entire building will have a new automatic fire suppression system installed per NFPA 13 and 13R. A completely new fire alarm will be installed per NFPA 72 throughout the building. A new smoke detection system will be in the non tenant fire areas, (ie: corridors of all floors). The majority of the building is non combustible concrete columns, floors meeting or exceeding 1 hour fire resistive ratings. New in fill floor areas will be 1 hour fire resistive construction. The floor areas were removed in the uncompleted concept to build racquetball courts. Since then all the existing floors were used for limited general storage. If the existing floors, and residential unit walls had not been removed in the 80's, creating unused storage space, the existing non sprinklered building use could have been allowed to continue. The hardship is that without the ability to use Section 3410 this project would not be possible without the reintroduction of these floor areas.

CI (b) *The existing 4 story YMCA constructed in 1919 and 1970, is undergoing a change of use on the upper 3 floors from an A-3 to an R-2, with the 1st floor and basement staying the A-3 YMCA and with the use of Section 3410 analysis shows a failing score by 39.7 points even with the planned fire safety improvements noted below and in the analysis. The request is the granting of these additional points in order for the analysis to pass.* The proponent advises that the entire building will have a new fire suppression system installed per NFPA 13 and 13R. The existing stair 1 will be provided with a draft curtain, close spaced sprinklers no more than 6' apart around the perimeter of the opening of the 1st floor per NFPA 13. A completely new fire alarm will be installed per NFPA 72 throughout the building. A new smoke detection system will be in the non tenant fire areas, (ie: corridors of all floors). The majority of the building is non combustible concrete columns, floors meeting or exceeding 1 hour fire resistive ratings. New in fill floor areas will be 1 hour fire resistive construction. The new residential unit walls had not been removed in the 80's, creating unused storage space, the existing non sprinklered building use could have been allowed to continue. The hardship would be that in order to pass the analysis the building most likely would have to have more significant modifications (separation between each use group) that would be extremely difficult and expensive to construct due to the configurations of the use groups and the existing construction.

CI (c) *The existing 4 story YMCA (constructed in 1919 and 1970) is undergoing a change of use to senior housing (R-2) and new 1 hour fire partitions for dwelling unit separations and corridors will be constructed on existing structure that is not 1 hour, the only area in non compliance is over the pool deck area on the 1st floor, which code requires structural continuity for 1 hour fire partitions for dwelling unit separations and corridors.* The proponent advises that the entire building will be sprinklered throughout with NFPA 13 and 13R sprinklers. A complete NFPA 72 fire alarm system will be installed throughout. A new smoke detection system will be installed in the non tenant areas. The majority of the building is non combustible concrete columns, floors meeting or exceeding 1 hour fire resistive rating. The 10 non rated steel columns are located in the first floor pool area (pool deck, partially in walls, locker rooms, etc.). The hardship involves the cost and difficulty to provide 1 hour fire rating around 10 existing steel columns due to their

locations within walls, adjacent to window frames, etc. especially being located in the pool area.

CI (d) *Card readers will be used to gain access from the stairway egress doors from stair 1 onto the R-2 floors 2, 3 & 4 which is not allowed in accordance with the code.* The proponent advises that the entire building will be sprinklered throughout with NFPA 13 and 13R sprinklers. A complete NFPA 72 fire alarm system will be installed throughout. A new smoke detection system will be installed in the non tenant areas. The stairway doors will unlock automatically upon the sprinkler activation, fire alarm activation or loss of power. The doors will remain latch able but not locking until the entire system is reset. The hardship is the ability to keep the floors secured with the use of card swipes.

CI (e) *The new automatic sprinkler system is being installed throughout the entire building except for the swimming pool area (over the pool, deck, spectator viewing areas).* The entire building will be sprinklered throughout per NFPA 13 and 13R, except for these areas stated. Locker rooms, storage, offices, filter rooms, etc. will be protected per throughout by the new system. A completely new fire alarm system will be installed per NFPA 72. A new smoke detection system will be installed in the non tenant areas (ie: corridors on all floors). Limited combustible loading and separation distance between items are found on a pool deck. The hardship involves the difficulty to install new automatic fire suppression system in this existing portion of the building nor undergoing any renovations.

CI (f) *The existing 8" CMU elevator shaft and equipment room may not be 2 hour fire resistive construction and a new automatic sprinkler system is being installed (NFPA 13 and 13R systems) are being installed throughout the building, except in the elevator shaft and equipment room, which code exception allows the elimination of the sprinkler system if the shaft and equipment rooms are 2 hour fire resistive rated construction.* The entire building will be sprinklered throughout per NFPA 13 and 13R, except for these areas stated. Locker rooms, storage, offices, filter rooms, etc. will be protected per throughout by the new system. A completely new fire alarm system will be installed per NFPA 72. A new smoke detection system will be installed in the non tenant areas (ie: corridors on all floors). The existing elevator shaft and equipment room (constructed in 1930) are constructed of 8" CMU. At this time, prior to construction, it is not possible to do a proper investigative work to verify whether the materials meet the 2 hour rating. The existing elevator shaft has 3 sides open (exterior walls) to an exterior courtyard on floors 2, 3 & 4. The hardship involves the difficulty and expense to either add to the existing wall construction to obtain the 2 hour fire rating or to install new automatic fire suppression system in the shaft and equipment room.

CI (g) *During this major renovation an existing corridor will be converted over to an exit passageway leading from an existing stair enclosure to the outside, the existing corridor can be made to be one hour, if not already, however some existing normally non occupied rooms cannot be move and code limits the openings into the passageway from normally occupied rooms*. The entire building will be sprinklered throughout per NFPA 13 and 13R, except for these areas stated. Locker rooms, storage, offices, filter rooms, etc. will be protected per throughout by the new system. A completely new fire alarm system will be installed per NFPA 72. A new smoke detection system will be installed in the non tenant areas (ie: corridors on all floors). The doors in the specific rooms (maintenance, office, pool area, mechanical room between the whirlpool and steam room)

will be provided with close spaced sprinklers placed on the room side of each room no more than 6' on center, and no more than 12" from the surface of the door. The hardship involves the affected change of use to this existing corridor to a passageway and the fact that no significant construction is scheduled for this 1st floor area.

13-10-51 CI **SPPE – Drive Machine Replacement – Tipton**

The variance is to allow the installation of a new drive machine without meeting the requirements of Section 2.19 of ANSI A17.1, which is the current elevator code. The proponent advises that this will require substantial additional work and time making this emergency repair unfeasible. The non-compliance affects a special purpose elevator in an industrial area designed for use by trained personnel only. The existing equipment does not currently meet Section 2.19 and while the new machine will not meet this provision it will result in safer equipment and a safer work environment. The hardship is the cost to repair the drive machine alone is $46,000.00 and the addition of the unintended movement requirements in Section 2.19 would require complete rework of the electrical and control components of this tripling and the cost would be over $150,000.00. the owner hopes to accomplish all of these upgrades in stages making both the investment and downtime manageable. When will the total code compliance be completed? Defer to Commissioner Corey.

13-10-52 B **Boyd Corporation – Addition – Elkhart** Project #367023

The existing building is in noncompliance for allowable area and will be put into further noncompliance with the addition, because of lack of separation between the building and the property lines on the north, east, and south. The current building is F-1 occupancy of Type IIB construction and is 79,000 sq. ft. The building is fully sprinklered but only has a 25' distance from the north property line. The proposed addition of 35,700 sq. ft. will be fully sprinklered and would be only 25' from the east property line and 30' from the south property line. The proponent advises that there are easements on three of the four sides that give some extra distance between the properties. There is a 30' utility easement along the north side of the adjacent property to the south which creates a 60' separation between the buildings to the south. There is an existing 35' easement along the west side of the adjacent property to the east, creating a 60' separation between the buildings to the east. The lot is currently undeveloped but zoned for industrial. The two adjacent lots to the north, the eastern lot has a 15' utility easement along the south side creating a 40' separation between the buildings. This lot is currently undeveloped but zoned industrial. The proponent proposes to install closely spaced sprinklers along the inside of the existing building and the addition exterior walls adjacent to this lot. The western of the 2 lots to the north has no easement. There is an existing building located 50' from the existing Boyd building and the proponent advises that they will install a deluge sprinkler system along the exterior side of the existing building adjacent to this lot. The hardship is the construction of fire walls to separate existing buildings would severely limit productivity because of the limits on openings allowed in the fire walls. Also the costs for the walls would be in excess of $500,000.00.

13-10-53(a)(b) **Break and Run Music Venue – Fort Wayne** Project #365958

CI (a) *Existing 12 inch CMU walls extending through the existing roof will be used as fire walls for the purpose of defining the building area containing this project.* The proponent advises that the walls may not comply with all requirements of the current code as a fire wall – due to the change of occupancy the existing construction related to code compliance for this tenant space is required to comply with current code. The project involves the conversion of an existing retail space of 5,140 sq. ft. for use as a night club assembly space, classified as A-2 occupancy. The existing CMU walls in question contain the current project tenant space, and the adjoining 10,950 sq. ft. retail (M occupancy) tenant space and an unleased building utility space of 410 sq. ft. that is evaluated as part of the A-2 occupancy fire area. The building was constructed in 1960 and is of Type IIIB construction, based on masonry exterior walls and a minor amount of existing interior wood construction. The proponent advises that the CMU wall to the north provides a separation from the Break and Run Billiards tenant space, including a 3 hour rated fire door assembly. The CMU wall to the south does not have any openings. The project tenant space will be separated from the existing retail tenant space to the south with a 2 hour fire barrier, constructed of metal studs and gypsum board. The hardship is that the success of the project is dependent upon using the existing CMU walls to define the building area in which it occurs.

CI (b) *The building area in which the project occurs exceeds current code allowable area by approximately 19% - due to the change of occupancy the building area in which this tenant space occurs is required to comply with the current code.* The project involves the conversion of an existing retail space of 5,140 sq. ft. for use as a night club assembly space, classified as an A-2 occupancy. The existing CMU walls in question contain the current project tenant space, and the adjoining 10,950 sq. ft. retail (M occupancy) tenant space and an unleased utility space of 410 sq. ft. that is evaluated as part of the A-2 occupancy fire area. The allowable area is calculated as follows for the mixed use occupancy building area, based upon frontage of 48%; (5,540 sq. ft./ 11,685 sq. ft.) + (10,900 sq. ft. / 15,375 sq. ft.) = 1.187, or just less than 19% over the allowable area. The building was constructed in 1960, is classified as Type IIIB construction, based upon masonry exterior walls and a minor amount of existing interior wood construction. The proponent advises the project tenant space will be protected with an automatic sprinkler system per NFPA 13. The 12" CMU wall to the north provides a separation from the Break and Run Billiards tenant space, including a 3 hour rated fire door assembly. The project tenant space will be separated from the existing retail tenant to the south with a 2 hour fire barrier, constructed of metal studs and gypsum board. The hardship is the project's success is dependent upon the location of the space within the building given the existing conditions – construction of a new structurally independent fire wall would cause the project to be abandoned.

13-10-54 NVR/BI **Purity Wholesale Grocers Office – Remodel – Lebanon** Project #365854

The new warehouse is approximately 479,156 sq. ft. in area and of Type IIB construction and fully sprinklered with the exception of the IT room # 119 and the Telephone Equipment Room #120, which will be protected with a clean agent in lieu of the sprinkler system. The 2 rooms with the electronically sensitive equipment will be protected with an FE 25 clean agent suppression system. The special suppression system is better suited

to the protection of the electronic systems for the owner and designed specifically for the protected hazard and should not limit the use of the unlimited area provisions of the building code.

13-10-55 BI **Fox Apartments – Bloomington** Project #366914

Based on the fire separation distance of approximately 12 inches to the south property line, exterior openings are not permitted – code does not permit openings when there is 5 feet or less fire separation distance. The 2nd, 3rd and 4th floors each have openings that comprise approximately 13% of the exterior wall per story. There are no openings on the 1st floor facing the south property line. The building is classified as R-2 on floors 2 through 4 and S-2 occupancy (enclosed parking) on the 1st floor and will be of Type VA construction. The proponent advises that the building will be protected with an automatic sprinkler system per NFPA 13R with protection on the 1st floor parking garage per NFPA 13. There will be quick response sprinklers located at the ceiling level within 12" horizontally of each exterior opening in the south exterior wall. The building on the adjoining property to the south is located approximately 26' from where the exterior wall of the proposed building will be located. The building on the adjoining property has masonry exterior wall with a limited amount of openings, and the area alongside the building on the north of the property is a paved vehicle lane. The hardship is that the exterior openings are necessary to provide natural light into the dwelling units on the south side of the building.